ENVIRONMENTAL ASSESSMENT/ REGULATORY IMPACT REVIEW/ INITIAL REGULATORY FLEXIBILITY ANALYSIS

For Amendments 48/48 for the Process by Which Annual Harvest Specifications Are Established for Alaska Groundfish Fisheries
Implemented Under the Authority of the
Fishery Management Plans
for the Groundfish Fishery of the Bering Sea and Aleutian Islands Area and
Groundfish of the Gulf of Alaska

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Abstract: This Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) provides an analysis of alternative administrative procedures necessary to support the harvest specifications process for setting total allowable catch and other management measures for the Alaska groundfish fisheries in the Exclusive Economic Zones of the Bering Sea and Aleutian Islands management area and the Gulf of Alaska. This Federal action would amend the process for establishing annual harvest specifications and would update the fishery management plan language to reflect current conditions and practices of Alaska's groundfish fisheries management. Objectives for the revised process include managing the Alaska groundfish fisheries based on the best available scientific information and providing meaningful opportunity for useful public comment. The action is not expected to have significant environmental, social, or economic impacts. Harvest specifications would continue to be assessed under separate EA/RIR/IRFAs prior to agency approval of final harvest specifications.

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EXECUTIVE SUMMARY

Each year, normally in December, proposed groundfish harvest specifications for the Bering Sea and Aleutian Islands Management Area (BSAI) and Gulf of Alaska (GOA) are published in the *Federal Register*. These proposed specifications are based upon total allowable catch (TAC), acceptable biological catch (ABC), and prohibited species catch (PSC) amounts, and apportionments thereof, which have been recommended by the North Pacific Fishery Management Council (Council) for the current year. Based on public comment on the proposed specifications and information made available at the December Council meeting, final specifications are published in the *Federal Register* during February or early March. So that fishing may begin January 1, regulations authorize the release of one-fourth of each proposed TAC and apportionment thereof, one-fourth of each PSC and apportionment thereof, and the first seasonal allowance of BSAI and GOA pollock and Pacific cod and BSAI Atka mackerel. These interim specifications are based on the proposed specifications and published in the *Federal Register* in December, and are superseded by the final specifications.

The existing harvest specification process is problematic for several reasons. The public is notified of and given opportunity to comment on, proposed specifications that often are outdated by the time they are published. Stock assessment revisions between approval of the proposed and interim specifications and the final specifications may result in changes between the proposed and final specifications. The publication of proposed specifications each year can confuse the public, because incomplete and outdated information may be provided due to the need to adhere to a strict schedule in order to comply with all relevant regulations. Because the interim specifications are based on the proposed specifications, they do not take into account the recommendations contained in the Groundfish Plan Teams' final Stock Assessment and Fishery Evaluation (SAFE) reports, or the recommendations coming from public testimony, the Science and Statistical Committee (SSC), the Advisory Panel (AP), and the Council at its December meeting. One fourth of the initial TAC and PSC amounts have been found to be an inadequate amount for those fisheries that attract the greatest amount of effort at the beginning of the fishing year. As fisheries are seasonally apportioned to meet other management needs, interim TACs based on one fourth of the annual TAC increasingly compromise other management objectives. Under the current process, taking the regulatory actions necessary to set interim, proposed, and final specifications entails staff work that is duplicative and inefficient. For these reasons, NMFS seeks to revise the harvest specification process.

The objectives of modifying the harvest specifications process are to manage fisheries based on the best scientific information available, provide for adequate prior public review and comment to the Secretary on Council recommendations, provide for additional opportunity for Secretarial review, minimize unnecessary disruption to fisheries and public confusion, and promote administrative efficiency.

The alternatives for amending this process are:

Alternative 1. Status quo. (Publish proposed specifications, followed by interim and final specifications.)

Alternative 2: Eliminate publication of interim specifications. Issue proposed and final specifications prior to the start of the fishing year based on projections of TACs.

Alternative 3: Issue proposed and final harvest specifications based on an alternative fishing year schedule (July 1 to June 30).

Option 1: Set sablefish TAC on a January through December schedule.
Option 2: Reschedule the December Council meeting to January.

Alternative 4: Use stock assessment projections for biennial harvest specifications. Set the annual harvest specifications based on the most recent stock assessment for Year 1 and set harvest specifications for Year 2 based on projected overfishing level (OFL) and ABC values. Set PSC limits annually.

Alternative 5 (Preferred): Establish harvest specifications effective for up to two years (Year 1 and part or all of Year 2).

Option (Preferred). Set pot and hook-and-line sablefish harvest specifications annually for Year 1.

Stand Alone Options:

Option A: Abolish certain TAC Reserves

Option B (Preferred) : Update FMPs to reflect nature of fishing activities and harvest specifications process.

Option C (Preferred): Set biennial harvest specifications for certain GOA target species/complexes.

Section 4.11 gives the environmental summary and conclusions. The environmental components that may be affected by the proposed action are target groundfish species (including the State groundfish fisheries), prohibited species, Steller sea lions, State fisheries, individual fishing quota (IFQ) fisheries, and American Fisheries Act (AFA) fisheries. State and AFA fisheries are potentially affected by the shifting of the fishing year under Alternative 3. Possible difficulties in achieving the B season pollock TAC may be experienced by the AFA fisheries in years of high TAC. However, actions could be taken by the State and the pollock industry that would mitigate these effects. Option 1 to Alternative 3, which would set the sablefish TAC on a January through December schedule, would allow the sablefish IFQ program to be managed concurrently with the halibut IFQ program, eliminating any potential effects on these programs from shifting the fishing year. Even though the sablefish stocks are not likely to be affected by management based on projections, the industry may experience revenue losses with the conservative setting of a projected harvest amount.

Table ES-1 provides a summary of the anticipated effects of the alternatives on certain environmental components compared to Alternative 1 (the status quo). The effects of Alternative 5 are expected to be similar to the effects of the status quo, because the use of information and timing of rulemaking are similar. Results from a simulation model and retrospective analysis indicated that under alternatives 2, 3, and 4, groundfish harvests would be lower and the biomass of several target species would be higher than under alternatives 1 or 5. This was due to increased uncertainty, as harvest levels are projected further into the future for alternatives 2, 3, and 4, than for Alternative 5 and the status quo. Alternative 3 is likely to provide less biomass variability and more likelihood of setting the TAC below the OFL than alternatives 2 or 4. A number of factors were not accounted for in the retrospective analysis and simulation model. The full Council process itself can have a substantial effect on the final TAC and has historically been more conservative than predicted by the groundfish analysis presented in Section 4.1 of this document. Potential overfishing and excessive seasonal harvest identified by the Groundfish Plan Team are likely to be mitigated through the Council process and may also be mitigated by additional regulatory action, if new information becomes available during the current fishing year indicating that the level of fishing is inappropriate. The effects on groundfish fishing mortality rates, biomass, and spatial

and temporal harvest of groundfish from alternatives 2, 3, 4, and 5 would be insignificant according to the results of our analysis (Section 4.1), and using the significance criteria in the June 2004 programmatic supplemental environmental impact statement for the groundfish fisheries management in Alaska (PSEIS).

The only prohibited species that may be affected by any of these alternative is salmon, under Alternative 3. The shifting of the fishing year would provide less time to the pollock industry to harvest their B season apportionment, which may result in more fishing during a period of higher salmon bycatch rates. This would be of more concern during years of high pollock TAC. The effect is unknown because of actions that the pollock industry may take to reduce the potential bycatch.

All of the alternatives may have temporal effects on the groundfish fisheries, posing difficulties in complying with Steller sea lion protection measures. These measures include the temporal dispersion of harvest of prey species to reduce the likelihood of competition between the groundfish fisheries and Steller sea lions. If biomass is falling, the projected first seasonal apportionment could potentially exceed the Steller sea lion protection measures. Inseason actions or emergency rulemaking may be used to reduce the first seasonal apportionment and possibly to mitigate any potential effects on Steller sea lions. However, such effects could be mitigated through conservative setting of TAC and regulatory action, so the effects on the temporal harvest of prey on Steller sea lions is likely to be insignificant. Under Alternative 3, current seasons may need to be adjusted for BSAI pollock and Pacific cod trawl fisheries to meet Steller sea lion protection measures and to coincide with the July 1 through June 30 fishing year.

Table ES-1 Effects on Environmental Components — Comparison of Alternatives 2, 3, and 4 to Alternative 1 and 5

Environmental Component	Alt. 2	Alt. 3	Alt. 4
Groundfish Target species	Higher potential to set TAC over the OFL for short lived species. Higher biomass amounts over time.	Potential to set TAC over the OFL between Alt. 2 and Alt. 1. Biomass levels between Alt. 2 and Alt. 1. Similar to Alt. 5, if additional proposed rule required.	Potential to set TAC over the OFL higher than Alt. 2 Higher biomass amounts than Alt. 2 over time.
Prohibited Species	Same as Alt. 1 and 5	Possible increase in salmon bycatch in the BSAI pollock fishery	Same as Alt. 1 and 5
Steller sea lions	More potential for indirect effect from harvest uncertainty than Alt. 1, 3, and 5. Temporal harvest of prey effects similar to Alt. 1 and 5	Less potential for indirect effect from harvest uncertainty than Alt. 2 but more than Alt. 1 and 5. Temporal harvest effects similar to Alt. 1 and 5.	More potential for harvest uncertainty than Alt. 2. Temporal harvest effects likely to be more than Alt. 2

Regulatory Impact Review

The Regulatory Impact Review (RIR) addresses the requirements of Presidential Executive Order (E.O.) 12866 for a benefit-cost analysis of the proposed action and its alternatives. A complete benefit-cost analysis was not possible. Information is not available to estimate dollar values for many of the benefits

and costs. Moreover, the proposed action affects the conditions under which the Council and Secretary will make decisions about future TAC specifications. The actual benefits and costs will depend on the decisions made by the Council and Secretary, and those decisions cannot be predicted at this time. The RIR does examine a set of outcomes from this action that may affect the benefits and costs. Three general categories of outcomes are identified: (1) impacts on the harvest specifications process itself, (2) changes in the fishing year under Alternative 3, and (3) changes in harvests and biomass size under Alternatives 2, 3, and 4.

Alternatives 2, 3, 4, and 5 provide more time for the process of establishing harvest specifications. Each should provide more time for some combination of scientific analysis, peer review of scientific work, public notice and comment on the proposed specifications regulations, and consideration by the Council and the Secretary of Commerce. Because these alternatives will provide for public notice and comment on the specifications actually anticipated for the coming fishing year, comments received from the public will be more useful. Alternatives 2 and 4 provide the most time for this process; Alternative 3 increases the amount of time available, but not to the same extent. It may be difficult, moreover, to complete the entire rulemaking process in the time allotted under Alternative 3, especially with Option 2. Option 2 to Alternative 3 would provide additional time for stock assessment scientists to complete analysis, but it may be administratively difficult to reschedule the December Council meeting to January. Alternative 5 provides additional time for notice and comment rulemaking and Secretarial decision, but not for scientific analysis of survey and other data.

Alternative 3 changes the fishing year to begin on July 1. A comparison of fishing seasons for different species with the proposed July 1 start date suggests that shifting the start date from January 1 to July 1 would cause little disruption to many fisheries, with the important exception of the sablefish IFQ fishery in the GOA and BSAI. A change in fishing year, and associated change in TAC, would be extremely disruptive in the middle of this fishing season, which currently runs from March 15 to November 15. The season could theoretically be delayed to start on July 1, but the administration of the individual quotas in this fishery requires a long closure between the end of one fishing season and the start of the next. This closed period is best in the wintertime when fishing conditions aren't as good, and when there is less potential for bycatch conflicts with the related halibut fishery. However, a July 1 start for the year would mandate a closed period from early March through the end of June instead of mid-November through mid-March. Option 1 to Alternative 3, under which the sablefish TAC would continue on a January through December schedule, would eliminate this potential problem.

Alternatives 2, 3, and 4 lengthen the time between biomass surveys and the year in which specifications based on the surveys (specifications year) become effective. Under Alternative 1, the time between the survey information and implementation of the annual fishery based on that information is approximately seven months, because the first three months of the year are managed under interim specifications (which are based on the previous years TACs). Alternative 3 increases the period by three months, Alternative 2 increases the period by nine months, and Alternative 4 increases it by an average of 15 months in the cycle (nine months for the first year of the biennial specifications, and 21 months for the second year). As the length of time between the biomass surveys and the specifications year increases, there is some evidence that biomass levels may vary more, ABCs and harvests may become smaller, because lower harvest rates are triggered more often by the harvest control rule, mean spawning biomass levels become larger, and harvest variability increases. These results are extremely tentative.

If the harvest levels were to decline, as suggested by some modeling results, revenues to industry would also decline, all things being equal. Moreover, an increase in the year-to-year variability of harvest, also

suggested by some model results, may impose increased interest and inventory carrying costs on industry.

Initial Regulatory Flexibility Analysis

The Initial Regulatory Flexibility Analysis (IRFA) identifies the numbers of small entities that would be regulated by the action, describes the adverse impacts that may be imposed on these small entities, and describes alternatives to the preferred alternative that could mitigate these adverse impacts, and explains why these alternatives were not chosen. This IRFA addresses the statutory requirements imposed under the Regulatory Flexibility Act (RFA) of 1980, as amended by the Small Business Regulatory Fairness Enforcement Act (SBREFA) of 1996.

This IRFA uses the Small Business Administration (SBA) definitions of small entities. Under these definitions, small fishing entities are those that gross less than $3.5 million (annually), and small shoreside processing entities are those that employ fewer than 500 persons. NOAA Fisheries has adopted a policy which defines catcher/processors as "fishing operations" for purposes of RFA, and therefore utilizes the fishing vessel gross revenue criterion in evaluating this sector. Non-profit entities are, in general, also considered small, as are governmental jurisdictions with populations of 50,000 or fewer (see IRFA for details of these criteria). The SBA also requires that an entity's affiliations be considered when determining its size.

Large numbers of small entities would be regulated by this action. These include an estimated 1,211 small groundfish catcher vessels, 44 small groundfish catcher/processors, 36 shoreside groundfish processors, and six CDQ groups. The total numbers of entities regulated by this action include 1,228 groundfish catcher vessels, 80 groundfish catcher/processors, three groundfish motherships, 49 shoreside groundfish processors, and six CDQ groups.

There is some evidence that alternatives 2, 3, and 4 would lead to somewhat reduced revenues, cash flow, and profits for small entities, although this result is uncertain. Estimating the size of the impacts on the small entities is not possible, although the potential impacts among these three alternatives may be greatest for Alternative 4, less for Alternative 2, and least for Alternative 3. Increased year-to-year fluctuations in gross revenues may occur and, among these three alternatives, these also were expected to be greatest for Alternative 4, less for Alternative 2, and least for Alternative 3. Alternative 5 is not expected to have significant impacts on the level of variability of revenues, compared to the status quo. The analysis was unable to determine whether or not there would be a disproportionate impact on small entities, in comparison to the impact on large entities. The analysis did identify additional impacts that were not adverse. Alternatives 2, 3, 4, and 5, provide better opportunities for small business input into decision making about specifications, because they provide for more informed public notice and comment.

The preferred alternative (Alternative 5 with the sablefish option) provides the least burden on small entities compared to alternatives 2, 3, and 4.

If the preferred alternative is adopted, environmental impacts and socioeconomic impacts resulting from changing fishing patterns as a result of the preferred alternative will be assessed annually in the EA/RIR/IRFA that accompanies the final harvest specifications.

Comparison of Alternatives and Options and Selection of a Preferred Alternative and Options

In October 2003, the Council recommended Alternative 5, together with the pot and hook-and-line sablefish option and stand alone options B and C. Alternative 1 was not considered, because of the difficulty of complying with the Administrative Procedure Act in developing the interim specifications. Although Alternatives 2 and 4 meet all of the objectives of the action, these alternatives were not recommended due to their potential adverse effects on management of short-lived groundfish target species and on fishing revenues. Alternative 3 has less potential for effects on the management of short-lived groundfish target species than Alternatives 2 and 4, and ensures a process which meets the objectives of this action, but the Council decided that the potential problems entailed in shifting the fishing year would outweigh the advantages of an improved administrative process.

Although Alternative 5 establishes a more complex administrative process, the Council decided that the benefits of maintaining the current timing of the harvest specifications (when the best information is available and the start of the fishery is based on that information) outweighed the additional administrative burden. Alternative 5 poses no adverse effects on the human environment beyond those already analyzed under the status quo. Adopting the sablefish option together with Alternative 5 will ensure that the IFQ sablefish fishery is conducted based on the best available information and concurrent with the IFQ halibut fishery, reducing administrative burdens and reducing the potential waste of halibut or sablefish.

Option A was not recommended by the Council in October 2003, due to industry testimony indicating that the nonspecified reserves in the BSAI are still useful. Options B and C were recommended. Option B proposes to update the groundfish FMPs; it is a housekeeping option with no effect on the human environment. Option C would set biennial harvest specifications for certain GOA species and species groups. It would have no effect on the human environment and would provide savings in NMFS staff resources in developing some GOA stock assessments and harvest specifications.

1.0 PURPOSE AND NEED FOR ACTION

The proposed federal action is (a) change the administrative process used to implement harvest specifications which are used to manage the groundfish fisheries off Alaska and (b) update the fishery management plans (FMPs) for the Bering Sea and Aleutian Islands management area (BSAI) and Gulf of Alaska (GOA) groundfish fisheries. This Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) analyzes revisions to the harvest specification administrative process for determining and implementing acceptable biological catches (ABCs), total allowable catches (TACs), and prohibited species catch (PSC) limits and apportionments for the groundfish fisheries of the BSAI and the GOA. The intent of revisions to the harvest specifications process is to reflect current stock assessment and analytical requirements, to provide for the regulatory development and review process, to provide meaningful prior public review and comment to the Secretary on Council recommendations, and to provide for additional Secretarial review of proposed harvest specifications.

Under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1996, the United States has exclusive fishery management authority over all living marine resources, except for marine mammals and birds, found within the Exclusive Economic Zone (EEZ) between 3 and 200 nautical miles (nm) from the baseline used to measure the territorial sea. The management of these marine resources is vested in the Secretary of Commerce (Secretary) and in Regional Fishery Management Councils. In the Alaska region, the North Pacific Fishery Management Council (Council) has the responsibility to prepare FMPs for the marine resources it finds require conservation and management. The National Marine Fisheries Service (NMFS) is charged with carrying out the federal mandates of the Department of Commerce with regard to marine fish. The Alaska Regional Office of NMFS and Alaska Fisheries Science Center (AFSC, NMFS' research branch), research, draft, and support the management actions recommended by the Council.

The Magnuson-Stevens Act established that the FMPs must specify the optimum yield from each fishery to provide the greatest benefit to the Nation, and must state how much of that optimum yield may be harvested in U.S. waters. The FMPs must also specify the level of fishing that would constitute overfishing. Using the framework of the FMPs and current information about the marine ecosystem (stock status, natural mortality rates, and oceanographic conditions), the Council annually recommends to the Secretary TAC specifications and PSC limits and/or fishery bycatch allowances based on biological and economic information provided by NMFS and the public. The information includes determinations of ABC and overfishing level (OFL) amounts for each of the FMP established target species or species groups.

An environmental assessment (EA) is prepared pursuant to the National Environmental Policy Act (NEPA) to determine whether a proposed action will result in significant effects to the human environment. If the environmental effects of the action are determined not to be significant based on an analysis of relevant considerations, the EA and resulting finding of no significant impact are the final environmental documents required by NEPA. If it is concluded that the proposal is a major Federal action significantly affecting the human environment, an environmental impact statement must be prepared.

NEPA requires either an EA with a finding of no significant impact or an environmental impact statement (EIS) for all federal actions that may have a significant impact on the human environment. EAs are generally done when an action is not anticipated to have a significant impact on the human environment

or to provide additional information to support an EIS. The harvest specifications process alternatives examined in this EA/RIR/IRFA will continue to require an annual or biennial Federal action that includes further analysis for potential significant impacts from the annual harvest quotas and management measures.

The scope of this analysis does not extend to the setting of any particular TAC or PSC for any of the managed species. The focus of this analysis is the administrative process used to promulgate harvest specifications.[1] The reason is the actual setting of harvest specifications includes discretionary considerations and current information which must be analyzed in advance of each time period they are in effect. The harvest specifications process is an FMP component analyzed in the recently completed programmatic SEIS (PSEIS) (NMFS 2004b).

1.1 Project Area

This proposed action applies to the BSAI and GOA FMPs. Figure 1.1 shows the waters included in Federal groundfish fisheries off Alaska. The groundfish fisheries occur in the North Pacific Ocean and Bering Sea, in the EEZ, from 50°N latitude to 65°N latitude. The subject waters are divided into two management areas: the BSAI and the GOA. The BSAI groundfish fisheries effectively cover all the Bering Sea under U.S. jurisdiction, extending southward to include the waters south of the Aleutian Islands west of 170° W. longitude to the border of the U.S. EEZ. The GOA FMP applies to the U.S. EEZ of the North Pacific Ocean, exclusive of the Bering Sea, between the eastern Aleutian Islands at 170° W. longitude and Dixon Entrance at 132°40' W. longitude. These regions encompass those areas directly affected by fishing, and those that are likely affected indirectly by the removal of fish at nearby sites. The area affected by the fisheries necessarily includes adjacent State of Alaska, Canadian, and international waters. Harvest specifications and fishery management measures affect groundfish fishing throughout the BSAI and GOA management areas.

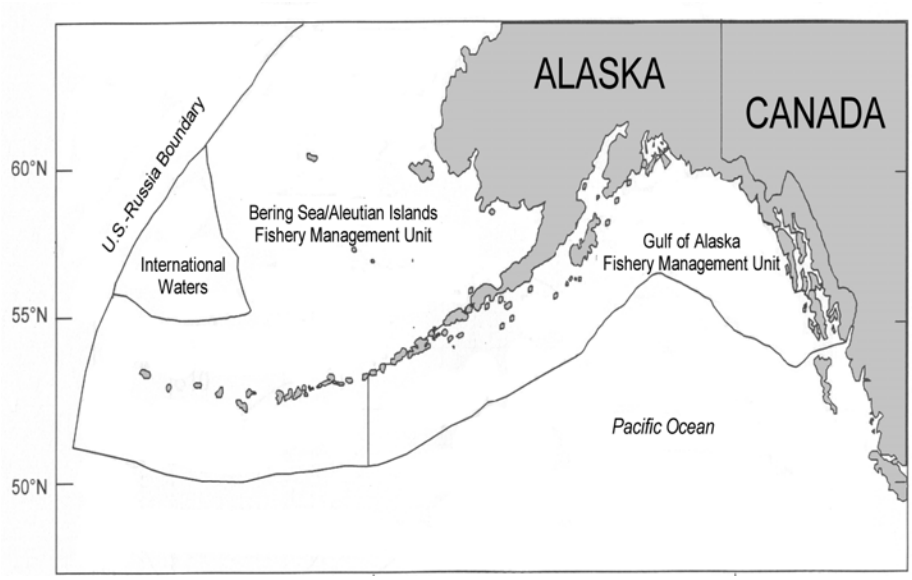


Figure 1.1 Federal Fisheries Off Alaska.

[1]Although, it also addresses some minor issues of updating FMP terminology.

1.2 Current Administrative Procedures for Harvest Specifications

Establishing harvest specifications involves the gathering and analysis of fisheries data. The groups responsible for analyzing the data for Council consideration are the Council's Groundfish Plan Teams (Plan Teams). These teams include NMFS scientists and managers, Alaska, Oregon, and Washington fisheries management agencies' scientists, and university faculty. Using stock assessments prepared annually by NMFS and by the Alaska Department of Fish and Game (ADF&G), Plan Teams calculate biomass, ABC, and OFL for each species or species group, as appropriate, for specified management areas of the EEZ off Alaska that are open to harvest of groundfish. Plan Team meetings are held in September to review potential model changes and are used for proposed ABC recommendations. In November, the Plan Teams' rationale, models, and resulting ABC and OFL calculations are documented in annual SAFE reports. The SAFE reports incorporate biological survey work recently completed, any new methodologies applied to obtain these data, and ABC and OFL determinations based on the most recent stock assessments. Periodically, an independent expert panel reviews the assumptions used in the stock assessments for a selected species or species group and provides recommendations on improving the assessment.

At its December meetings, the Council, its AP, its SSC, and interested members of the public, review the SAFE reports and make recommendations on harvest specifications based on the information about the condition of groundfish stocks in the BSAI and GOA fishing areas. The harvest specifications recommended by the Council for the upcoming year's harvest quotas, therefore, are based on scientific information, including projected biomass trends, information on assumed distribution of stock biomass, and revised technical methods used to calculate stock biomass.

Specification of the upcoming year's harvest levels is currently a three-step process. First, proposed harvest specifications, including ABCs, TACs, and PSC limits[2], are recommended by the Council at its October meeting and published in November or December in the *Federal Register* for public review and comment. In October, most current year stock assessments are not yet available. Since 2002, the proposed harvest specifications for a number of target species have been based on projections from the current SAFE reports, rather than rollovers of the current year's harvest specifications used for species with little stock assessment information, which had been the previous practice. This provided for a more scientifically based proposed harvest level for those species for which there is enough information available to allow for projections.

For most BSAI target species, the initial TAC (ITAC) is calculated as 85 percent of the proposed TAC (50 CFR 679.20(b)). The remaining 15 percent is split evenly between the Western Alaska Community Development Quota (CDQ) program reserve and a non-specified groundfish reserve. It is the nonspecified portion of the BSAI TAC reserves that is proposed to be eliminated in stand alone Option A in this analysis. See section 1.4 for more information. In the GOA, ITACs equal the full TAC, except for pollock, Pacific cod, flatfish, and the "other" species category. The ITACs for these four species or species groups equal 80 percent of the TACs. The remaining 20 percent of the TACs are established as a species specific reserve that also is proposed to be eliminated under stand alone Option A.

[2]BSAI crab, halibut, salmon, and herring bycatch limits are established in regulations and the Council recommends target fishery and seasonal apportionments of these PSC limits. The Council recommends the GOA halibut PSC limits, and the fishery allocations and seasonal apportionments.

In the second step, NMFS annually publishes interim specifications to manage the fisheries from January 1 until they are superseded by the final specifications. As specified in 50 CFR 679.20(c)(2), interim specifications are one-fourth of each proposed TAC and apportionment thereof, one-fourth of each proposed PSC allowance, and the first seasonal allowance of GOA and BSAI pollock and Pacific cod, and BSAI Atka mackerel.

The interim PSC limits are one quarter of the annual limit and PSC reserves. Seven and one-half percent of the PSC limits are set aside to establish the prohibited species quotas (PSQs) for the CDQ program (50 CFR 679.21(e)(1)(i)). For interim specifications, PSQ reserves are subtracted from the previous year's PSC limit, and 25 percent of the remaining amounts are established as an interim value until final specifications are adopted.

NMFS publishes the interim specifications in the *Federal Register* as soon as practicable after the October Council meeting. Retention of sablefish in the BSAI with fixed gear is not currently authorized under interim specifications. Further, existing regulations do not provide for an interim specification for the CDQ non-trawl sablefish reserve or for an interim specification for sablefish managed under the IFQ program. This means that retention of sablefish in the BSAI taken with hook-and-line or pot gear is prohibited prior to the effective date of the final harvest specifications.

Third step, final harvest specifications are recommended by the Council at its December meeting following completion of analysis of any new stock status information. These TAC specifications and PSC limits, and apportionments thereof, are recommended to the Secretary for implementation in the upcoming fishing year. With the final specifications, most of the non-CDQ reserves are released and the final TAC is increased by the amount of reserves released. Currently, the final specifications are typically implemented in mid to late February and replace the interim specifications as soon as they are in effect.

Table 1.1 Current FMP Timeline for Annual Harvest Specification Procedure.

September	Plan Teams review models for ABC recommendations for a number of groundfish species and recommends proposed ABCs to Council.
October	Council recommends proposed harvest specifications based on Plan Team, SSC, and AP recommendations.
November	Proposed specifications are published[1]. Interim specifications are published[1.] Plan Teams provide final groundfish ABC recommendations in SAFE reports.
December	Council recommends final groundfish specifications to NMFS.
January	Non-trawl groundfish fisheries open January 1 and trawl fisheries open January 20 under interim specifications equal to 25% of proposed specifications or first seasonal apportionment.
February	Non-specific reserves released and final specifications are published[2]

[1]Publication of proposed and interim specifications can occur as late as December.
[2]Publication of final specifications can occur as late as March.

Compliance with the Magnuson-Stevens Act, NEPA, the Endangered Species Act (ESA), Executive Order 12866 (EO 12866), and the Regulatory Flexibility Act (RFA) requires the development of detailed analyses of the potential impacts of the harvest specifications. This process usually involves the development of the SAFE reports, NEPA and RFA analytical documents first, with consultations on ESA

listed species and essential fish habitat (EFH) based on the preliminary preferred alternative in the NEPA document. These analyses are drafted to inform the Council, the public, and the management agencies.

An EA is normally written each year for the harvest specifications. The draft ESA and EFH consultations may be included in the draft EA as appendices to provide opportunity for public review and comment, and for the decision makers to consider ESA and EFH concerns before making a final decision. The regulatory impact review (RIR) required under EO 12866 usually is incorporated into the EA for regulatory actions, but has not been required for harvest specification notices, as further explained below. The RFA requires the development of an initial regulatory flexibility analysis (IRFA) for the proposed action and a final regulatory flexibility analysis for the final action analyzing potential impacts of the action on small entities. Development of these analyses requires substantial amounts of time and effort from a number of analysts in the NMFS Alaska Region and the AFSC. Four to six months are needed to adequately draft these analytical documents, and an additional month may be needed to finalize the documents after the Council makes its final recommendation on harvest specifications. However, currently, only about one week is available to draft the EA/IRFA for Council review in December, based on the final SAFE reports.

The current process used by the Alaska Region to publish most rules involves the Sustainable Fisheries Division drafting the rule package, with review by the Deputy Regional Administrator, the Regional Economist, Regional Enforcement Division, Protected Resources Division, Habitat Conservation Division, Restricted Access Management Division, and the Regional General Counsel. After Regional review is completed, the rule is forwarded to NMFS Headquarters, the Office of Sustainable Fisheries in Silver Spring, Maryland, where it undergoes reviews within NMFS before being forwarding to NOAA General Counsel. After clearing NOAA, the rule is reviewed by Department of Commerce (DOC) and usually the Office of Management and Budget, concerning EO 12866. OMB review has been waived for harvest specifications in the past on the basis that the harvest specifications process was part of a framework process. After the rule has been cleared, it is forwarded to the Office of the Federal Register. This final review process normally takes at least 30 days for a proposed rule, but can take much longer depending on the complexity of the rule, degree of controversy, or other workload priorities within different review tiers. The review process is repeated for the final rule and may or may not include additional OMB review, depending on the nature of the action.

Public involvement may occur at a number of stages during harvest specifications development. Table 1.2 provides an overview of the points of decision making and the opportunity for public comment. Public comments are welcomed and encouraged throughout the Council process. Comments received before and during the December Council meeting are considered in developing the annual specifications. Comments received by NMFS on the proposed rule are not likely to have much relation to the annual specifications because the proposed rule contains some of the previous year's harvest specifications or projections of harvest, and are not likely to mirror the Council's recommended final specifications. The Secretary is required by the Administrative Procedure Act (APA) to provide opportunity for public review and comment on proposed rules. NMFS, on behalf of the Secretary, is the final decision maker for approval and implementation of fishery specifications. Although the public is afforded opportunities to comment on the Council's recommended specifications, it is clear that at least in the Ninth Circuit, opportunities to comment to the Council on its development of Council recommendations do not satisfy NMFS' APA notice and comment responsibility in subsequent rulemaking to approve and implement the recommended specifications.

Table 1.2 Current Groundfish Harvest Specifications Process

Time	Activity	Opportunity for Public Involvement	Decision Points
January to August (of year prior to fishing year)	Plan and conduct stock assessment surveys.	Casual (staff and public may interact directly with stock assessment authors)	Cruise Plans finalized. Scientific Research Permits issued. Finalize lists of groundfish biomass and prediction models to be run. Staff assignments and deadlines set.
August - September	Preparation of proposed specifications recommendations. Groundfish Plan Teams meeting.	Open Public Meetings. *Federal Register* Notice of Plan Teams' Meetings.	Stock assessment teams fully scope out work necessary to complete SAFE reports, models to run, emerging ecosystem issues
September	Staff start drafting proposed and interim harvest specifications notices and EA/IRFA based on current year's specifications or current SAFE report projections.	None	Proposed specifications initially based on current year's specs. or projections. Interim specifications are formula driven based on proposed harvest specifications.
October 1-7 or so	October Council Meeting Presentation of proposed specifications, highlights of differences seen in recent surveys and ecosystem from past years. Council recommends proposed specifications.	Open Public Meeting. *Federal Register* Notice of initial action on next year's harvest specifications as an agenda item	Council recommends proposed harvest specifications.
November	NMFS reviews interim and proposed specifications	None	NMFS publishes proposed and interim specs.
November	November Plan Team Meetings. Staff start drafting EA/IRFA for final specs. Finalize SAFE Reports. Initiation of informal Section 7 Consultation on final specs., if needed.	Open Public Meetings. *Federal Register* Notice of Plan Teams' Meetings	Plan Teams make their ABC recommendations. Determination of whether Section 7 Consultation is needed and if it needs to be formal or informal.
November - December	File proposed and interim specification rules with *Federal Register*. Interim specs. EA completed.	Written comments accepted on for 30 days comment period for proposed rule. Comments welcome on EA/IRFA for proposed specs. Some specifications announced in the proposed rule **are not** the same as the final specifications that will be in the final rule.	Interim specifications effective on Jan. 1 or date of publication if after Jan. 1. Not realistic documents for which to invite public comments; however, by regulation, comments are accepted and are responded to in preamble of the final rule.

Time	Activity	Opportunity for Public Involvement	Decision Points
December 10-17	December Council Meeting. Release and present Draft EA/IRFA containing Final SAFE Reports, Ecosystem information, Economic SAFE report.	Open Public Meeting *Federal Register* notice. Agenda includes next year's harvest specifications. Last meaningful opportunity for comments on the next year's quotas.	Determine amount to nearest mt of next year's TAC and PSC quotas.
Late December-January	NMFS staff draft final harvest specifications rule. Harvest specifications EA/FRFA finalized.	Comments related to information released prior to and during December Council meeting may still be trickling in. Those comments are given consideration in final edits of the EA/FRFA. No public comment period for EA/FRFA.	ESA Section 7 and EFH consultation concluded on final specifications. FONSI determination..
February of **subject fishing year**	Submit final rule to Secretary for filing with Office of Federal Register.	None	Secretarial determination whether to approve Council recommendation.
February or March of **subject fishing year**	*Federal Register* publication of Final Rule.	None. Administrative Procedure Act sets up 30 day cooling off period that may be waived for good cause.	Final harvest specifications replace interim specifications on date of effectiveness.

1.3 Problem Statement for Harvest Specifications

The existing harvest specifications process is problematic due to a number of factors. NMFS must balance using the best available scientific information, meeting all the statutory rulemaking requirements, and having the final specifications in place, as soon as possible, in the new fishing year. This process does not allow for the prior public review of information related to the final Federal action, as required by the APA (see section 1.3.1). The difficulty lies in the insufficient amount of time available for analysis and rulemaking between when the new information is available and when the groundfish fishery is scheduled to start. Six months are usually required to completed analyses and rulemaking. In the normal rulemaking process, the Council is provided analyses regarding an action for initial and final consideration before submitting a final recommendation to NMFS. NMFS then reviews the Council's final recommendation and publishes final specifications after consider public comment.

Under the current harvest specifications process, proposed specifications are recommended by the Council in October, before the new fishery information is available or analyzed, in order to complete the rulemaking as soon as possible. The Council uses the new information available in November to recommend final specifications for the following year. A large difference between some proposed and final TACs can occur. The APA requires that the final rule is a logical outgrowth of the proposed rule, otherwise a new proposed rule should be published for comment or waiver of prior notice and public comment may be considered under certain circumstances. The current process also requires routine waiver of prior public notice and comment for generic reasons related to timing and availability of information, which raises serious legal concerns (Pollard 2003a). Interim specifications are also problematic for the management of the fisheries in the first part of the year, as explained further in Section 1.3.4.

1.3.1 Meeting Statutory Requirements

NMFS typically must comply with the following statutes during the harvest specifications process. One statute determines the process used for rulemaking (the APA) and four statutes require various types of analysis of the action (Magnuson-Stevens Act, NEPA, ESA, and RFA).

The APA:

§ 553(b) requires NMFS to publish proposed regulations in the *Federal Register*.

§ 553(c) requires NMFS to provide "interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments with or without opportunity for oral presentation", and NMFS must consider the relevant comments received. Waiver of prior public review and comment are allowed with good cause. (§553(b)(B))

§ 553(d) The rule is effective 30 days after the date of publication of the final rule in the *Federal Register*, unless the 30 days delay is waived for good cause. (§ 553(d)(3))

Magnuson-Stevens Act:

§ 305(b)(2) Any Federal agency must consult with the Secretary on any action that my adversely affect any essential fish habitat (EFH) identified under the act. For purposes of the harvest specifications, the interim and final specifications are analyzed.

National Environmental Policy Act (NEPA)

42 U.S.C.4332(2)(c) A Federal agency must determine if a major federal action may significantly affect the quality of the human environment. An environmental assessment must be prepared, followed by either a finding of no significant impact or further analysis in an environmental impact statement. This analysis is prepared during the proposed recommendation stage and finalized after the December Council recommendation is made.

Endangered Species Act (ESA)

§ 7(a)(2) Each Federal Agency must insure that the proposed action is not likely to result in jeopardy or adverse modification of critical habitat for ESA listed species. A consultation is required to analyze actions which may affect a listed species or its critical habitat. For purposes of the harvest specifications, the interim and final specifications are analyzed.

Regulatory Flexibility Act (RFA)

5 U.S.C 604(a) Federal agencies must review regulations to ensure that the regulations do not unduly inhibit the ability of small entities to compete. This analysis is prepared during the proposed recommendation stage (IRFA) and finalized after the December Council meeting, when the final specifications are recommended (FRFA).

The current Alaska groundfish specifications process requires approximately six months from the date the Council recommendation is made to when the final specifications are effective. The time period can be significantly longer depending on the complexity of the rules, implementation issues, and level of staff work necessary to finalize any accompanying analysis, after Council action. In the current specifications process, final stock assessment information used to develop harvest specifications is available 6 weeks (mid November) before the beginning of the fishing year. At least one month is needed by the Council to review the information and analysis and to develop recommendations. The Council then makes its

recommendations in mid December. The new information is analyzed in the November SAFE reports and is further analyzed under NEPA, Magnuson-Stevens Act, the RFA, and the ESA. Ideally, the Council should have these analyses available during its initial consideration of the harvest specifications in October so that its decision making is fully informed from the beginning. Under the current process, these analyses cannot be completed until after the November SAFE reports are completed, and the Council makes its final recommendations in December, before the Secretary of Commerce approves the action.

Harvest specifications proposed by the Council must be accompanied by NEPA and RFA analyses. NMFS staff prepares the *Federal Register* notice of proposed harvest specifications that describes and justifies the proposed specifications. Preparation and regional review of these documents typically take three weeks. Once the draft proposed harvest specifications and analyses are submitted to NMFS Headquarters for review and publication in the *Federal Register*, these additional reviews and clearances currently require three to four weeks. Likewise, preparation, review, and publication of a final rule within 30 days of the end of the comment period is unlikely because of the time necessary to review comments and complete the drafting and review of the final rule package and submittal to the *Federal Register*. The proposed action analyzed in this EA/RIR/IRFA does not address this difficulty in meeting these statutory deadlines.

The APA requires that the public has the opportunity for review and comment on the proposed rule and supporting analysis that is used for the proposed and final rules. The analyses supporting the final harvest specifications are the November SAFE reports, EA/FRFA, and ESA and EFH consultations that are completed after the December Council meeting. A final rule must be a logical outgrowth of a proposed rule or an additional proposed rule with opportunity for public review and comment is required. Alternatively, a final rule with a good cause waiver of prior public review and comment may be used in appropriate circumstances. Concerns have been raised about the current process of publishing proposed specifications prior to the December Council meeting which contain harvest levels that are not the same as those that will actually be implemented, establishing interim specifications based on these proposed specifications, and preempting public opportunity to formally review analyses and comment on the Council's December recommendations for the upcoming year's harvest specifications. The public is notified and given opportunity to comment on proposed specifications that may differ from the final specifications.

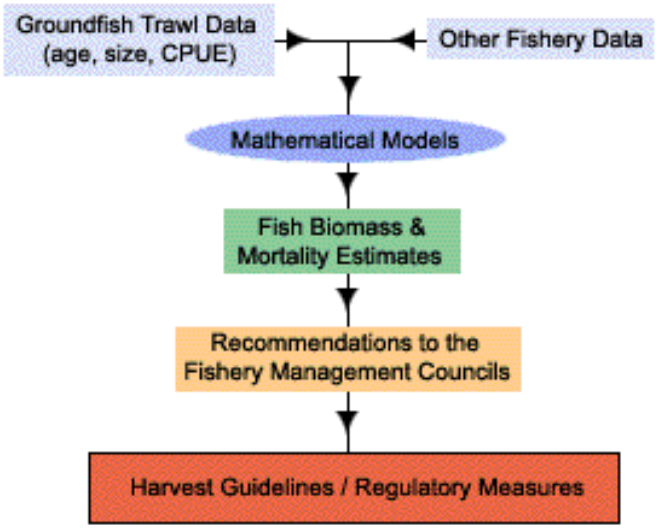
1.3.2 Availability of New Information

At the same time that NMFS is meeting requirements for proposed and final rulemaking, the actions must also be consistent with the National Standards in the Magnuson-Stevens Act, (§ 301(a)). National Standard 2 requires that conservation and management measures be based on the best scientific information available. For harvest specifications, critical decision making reports (SAFE reports) are completed in November of each year. These reports are based on new data from resource assessment surveys, which become available under different schedules for different areas and species. Currently, the anticipated schedule is as follows:

Schedule	**Survey**
Annual	Bering Sea (BS) summer bottom trawl survey on eastern BS shelf
Biennial	Bering Sea summer bottom trawl slope survey (first year is 2000) in the eastern BS even years
Annual	Winter pollock spawning survey in Shelikof and Bogoslof
Biennial	AI and GOA summer trawl surveys: GOA odd years; AI even years

Biennial	Summer acoustic surveys in BS and GOA: GOA shelf/slope odd years; eastern BS shelf/slope even years
Annual	GOA longline sablefish survey
Biennial	BSAI longline sablefish survey, BS odd years, AI even years
Biennial	GOA Demersal shelf rockfish line transect survey

The Resource Assessment and Conservation Engineering Division (RACE) conducts fishery surveys to measure the distribution and abundance of approximately 40 commercially important fin fish and crab stocks in the eastern BS, AI, and GOA. Data derived from these surveys are analyzed by AFSC scientists and supplied to fishery management agencies and to the commercial fishing industry.



The Groundfish Assessment Program is responsible for planning, executing, analyzing, and reporting results from surveys to establish time series estimates of the distribution and abundance of Alaska groundfish resources in the North Pacific. The program also investigates biological processes and interactions with the environment to estimate growth, mortality, and recruitment to improve the precision and accuracy of forecasting stock dynamics. The Groundfish Assessment Program, in cooperation with the RACE Shellfish Assessment Program, annually conducts a bottom trawl assessment survey for groundfish and king and Tanner crabs in the eastern BS. This survey was initiated in 1971 and has been conducted annually since 1979. Major triennial surveys have been conducted for groundfish resources in the AI region, and in portions of the eastern BS not included in the annual groundfish/crab survey, since 1977; these surveys are now conducted biennially (in even numbered years). Biennial surveys (in odd numbered years) also are conducted in the GOA. Annual surveys of sablefish abundance in the BSAI and GOA have been conducted since 1979, in cooperation with the AFSC Auke Bay Laboratory. Additionally, ADF&G uses direct observation to collect density estimates using a manned submersible to conduct line transects to estimate demersal shelf rockfish density (NMFS 2004a, appendix B).

The objectives of these surveys are to:

- Describe the temporal distribution and abundance of commercially and ecologically important groundfish species.
- Examine the changes in the species composition and size and age compositions of species over time and space.
- Examine reproductive biology and food habits of the groundfish community.
- Describe the physical environment of the groundfish habitat.

As the flowchart above depicts, data collected from trawl surveys and other related sources of information are used in various mathematical models to help researchers analyze biomass and mortality dynamics. Information derived from the computer simulations is then used by fishery management scientists to help predict appropriate harvest guidelines and regulatory measures for commercial groundfish species in upcoming seasons.

Publication of meaningful proposed specifications is currently not practicable, because much of the data necessary for calculating updated ABCs for the GOA and the AI are not available until late October or later. BS survey data are available in late August or early September. Many assessments are updated after all summer trawl survey data become available in October. As the year progresses, the Plan Teams and the Council also acquire updated information on harvest trends. Recommended final OFLs and ABCs are not produced for any BSAI or GOA groundfish species until the November Plan Team meeting. Regardless of the survey schedule for individual stocks, the SAFE reports are not completed and ready for Council consideration until mid November. The Council also needs the EA/IRFA for proposed specifications decision making, which, under the current process, is based on the SAFE report created for the current fishing year, rather than the SAFE report available in November for the follow fishing year for which the Council is proposing harvest specifications.

1.3.3 Development of Proposed Specifications and the Final Specifications

In 2002, the proposed 2003 harvest specifications were developed based on 2001 SAFE report biomass and ABC projections for 2003, for a number of groundfish target species. In previous years, the proposed TACs were based on rolling over the previous year's TACs. The intent of this methodological change was to provide proposed harvest specifications that were a more accurate reflection of the final harvest specifications. The reliability of the projections could be determined by a retrospective analysis, comparing projected amounts with rollover amounts.[3] The natural mortality of the species will influence the dependability of the projections. Shorter-lived species will more likely have projections with larger differences in TAC from the previous year's TAC compared to longer-lived species. The longer-lived species will have more stable amounts of harvest between years. Further explanation of the variability of biomass and the projection differences between short-lived and long-lived species is contained in section 4.1.

Table 1.3 shows the difference between the past practice of rolling over the current year's TACs for the following year's proposed TACs and the projections used in 2002, for proposed 2003 TACs in the BSAI. Atka mackerel, yellowfin sole, and northern rockfish were the only species that had rollover values different from the actual proposed TAC. For northern rockfish and yellowfin sole, the rollover values were closer to the final TAC amounts than the proposed TAC. For Atka mackerel, the overall proposed TAC was closer to the final TAC than the rollover amount. Even with the effort to have more scientifically based proposed TAC amounts for 2003, this effort did not appear to result in a significant improvement in the proposed TAC representing the final TAC over the past practice of rollovers of the previous year's TAC amounts in the BSAI fisheries.

[3]Dr. James Ianelli, Personal Communication, June 25, 2003, AFSC National Marine Fisheries Service, P.O. Box 15700, Seattle, WA 98115-0070.

Table 1.3 Comparison of Results for Past and Present Practices in Developing Proposed BSAI TACs

Species	Area	Rollover TAC from 2002	Proposed 2003 TAC	Final TAC	Rollover or Proposed TAC closer to final TAC?
Pollock	**BS**	1,485,000	1,485,000	1,491,760	
	AI	1,000	1,000	1,000	
	Bogoslof District	100	100	50	
Pacific cod	**BSAI**	200,000	200,000	207,500	
Sablefish	**BS**	1,930	1,930	2,900	
	AI	2,550	2,550	3,100	
Atka mackerel	**Total**	49,000	59,600	60,000	proposed
	Western AI	19,700	23,960	19,990	rollover
	Central AI	23,800	28,950	29,360	proposed
	Eastern AI/BS	5,500	6,690	10,650	proposed
Yellowfin sole	**BSAI**	86,000	76,000	83,750	rollover
Rock sole	**BSAI**	54,000	54,000	44,000	
Greenland turbot	**Total**	8,000	8,000	4,000	
	BS	5,360	5,360	2,680	
	AI	2,640	2,640	1,320	
Arrowtooth flounder	**BSAI**	16,000	16,000	12,000	
Flathead sole	**BSAI**	25,000	25,000	20,000	
Other flatfish	**BSAI**	3,000	3,000	3,000	
Alaska plaice	**BSAI**	12,000	12,000	10,000	
Pacific ocean perch	**BS**	14,800	2,620	1,410	
	AI Total		12,180	12,690	
	Western AI	5,660	5,660	5,850	
	Central AI	3,060	3,060	3,340	
	Eastern AI	3,460	3,460	3,500	
Northern rockfish	**BSAI**				
	BS	19	13	121	rollover
	AI	6,741	4,687	5879	rollover
Shortraker/rougheye	**BSAI**				
	BS	116	116	137	
	AI	912	912	830	
Other rockfish	**BS**	361	361	960	
	AI	676	676	634	
Squid	**BSAI**	1,970	1,970	1,970	
Other species	**BSAI**	30,825	30,825	32,309	
TOTAL			1,998,540	2,000,000	

Table 1.4 shows the difference between the rollover of 2002 TACs and the use of projections for proposing TACs for the GOA. Pacific cod, Pacific ocean perch, sablefish, "other" species, and northern rockfish have rollover amounts that were different than proposed TAC amounts. Compared to the rollover values, the proposed TAC was usually closer to the final TAC, except for the "other" species and northern rockfish, which were not projected values.

Table 1.4 Comparison of Results for Past and Present Practices in Developing Proposed GOA TACs

SPECIES	Area	2002 TAC rollover	Proposed 2003 TAC	Final TAC	Proposed or rollover closer to final TAC?
Pollock	W (610)	17,730	17,730	16,788	
	C (620)	23,045	23,045	19,685	
	C (630)	9,850	9,850	10,339	
	WYAK(640)	1,165	1,165	1,078	
	EYAK/SEO	6,460	6,460	6,460	
	TOTAL	58,250	58,250	54,350	
Pacific Cod	W	16,849	14,777	15,450	proposed
	C	24,790	21,743	22,690	proposed
	E	2,591	2,273	2,400	proposed
	TOTAL	44,230	38,793	40,540	proposed
Deep water flatfish	W	180	180	180	
	C	2,220	2,220	2,220	
	WYAK	1,330	1,330	1,330	
	EYAK/SEO	1,150	1,150	1,150	
	TOTAL	4,880	4,880	4,880	
Rex sole	W	1,280	1,280	1,280	
	C	5,540	5,540	5,540	
	WYAK	1,600	1,600	1,600	
	EYAK/SEO	1,050	1,050	1,050	
	TOTAL	9,470	9,470	9,470	
Shallow water flatfish	W	4,500	4,500	4,500	
	C	13,000	13,000	13,000	
	WYAK	1,180	1,180	1,160	
	EYAK/SEO	1,740	1,740	2,960	
	TOTAL	20,420	20,420	21,620	
Flathead sole	W	2,000	2,000	2,000	
	C				